

Appl. No. 10/815,164
 Response Dated November 28, 2005
 Reply to Office Action of August 26, 2005

Pending Claims:

This listing will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Original): A novel polyimide copolymer, which is a copolymer comprising two kinds of tetracarboxylic acid dianhydrides consisting of (A) isopropylidenebis (4-phenyleneoxy-4-phthalic acid) dianhydride and (B) 3,3', 4,4' -biphenyltetracarboxylic acid dianhydride, and (C) 6-amino-2-(p-aminophenyl)- benzimidazole.

Claim 2 (Original): A novel polyimide copolymer according to claim 1, wherein the copolymer has a film formability.

Claim 3 (Original): A novel polyimide copolymer according to Claim 1, wherein the two kinds of tetracarboxylic acid dianhydrides are used in a proportion of component (A) to component (B) of 10 – 80 mol.% to 90 – 20 mol.%.

Claim 4 (Original): A film formed from a novel polyimide copolymer according to Claim 3.

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Claim 5 (Original): A metal laminate manufactured by laminating a layer of a novel polyimide copolymer according to Claim 3 to a metallic foil.

Claim 6 (Original): A metal laminate according to Claim 5 for use as a flexible printed circuit board.

Claim 7 (Original): A novel polyimide copolymer, which is a copolymer comprising two kinds of tetracarboxylic acid dianhydrides consisting of (A) isopropylidenebis (4-phenyleneoxy-4-phthalic acid) dianhydride and (B) 3,3', 4, 4' -biphenyltetracarboxylic acid dianhydride, and two or three kinds of diamines consisting of (C) 6-amino-2-(p-aminophenyl) benzimidazole and (D) at least one kind of diamines consisting of bis(4-aminophenyl) ether (D₁) and phenylenediamine (D₂).

Claim 8 (Original): A novel polyimide copolymer according to Claim 7, wherein the copolymer has a film formability.

Claim 9 (Original): A novel polyimide copolymer according to Claim 7, wherein the two kinds of tetracarboxylic acid dianhydrides are used in a proportion of component (A) to component (B) of 10 – 80 mol% to 90 – 20 mol% and the diamines are used in a proportion of component (C) to component (D₁) of not less than 60 mol.% to not more than 40 mol.%.

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Claim 10 (Original): A novel polyimide copolymer according to Claim 7, wherein the two kinds of tetracarboxylic acid dianhydrides are used in a proportion of component (A) to component (B) of 10 – 80 mol% to 90 – 20 mol.%, and the diamines are used in a proportion of component (C) to component (D₂) of not less than 20 mol.% to not more than 80 mol.%.

Claim 11 (Original): A film manufactured from a novel polyimide copolymer according to Claim 9.

Claim 12 (Original): A film manufactured from a novel polyimide copolymer according to Claim 10.

Claim 13 (Original): A metal laminate manufactured by laminating a layer of a novel polyimide copolymer according to Claim 9 to a metallic foil.

Claim 14 (Original): A metal laminate manufactured by laminating a layer of a novel polyimide copolymer according to Claim 10 to a metallic foil.

Claim 15 (Original): A metal laminate according to Claim 13 for use as a flexible printed circuit board.

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Claim 16 (Original): A metal laminate according to Claim 14 for use as a flexible printed circuit board.

Claim 17 (Original): A process for manufacturing a metal laminate laminated with a polyimide copolymer layer, characterized by subjecting two kinds of tetracarboxylic acid dianhydrides consisting of (A) isopropylidenebis (4-phenyl-eneoxy-4-phthalic acid) dianhydride and (B) 3,3', 4,4' -biphenyltetracarboxylic acid dianhydride to reaction with one kind of diamine consisting of (C) 6-amino-2-(p-aminophenyl) benzimidazole or two or three kinds of diamines consisting of component (C) and (D) at least one kind of diamines consisting of bis(4-aminophenyl) ether (D₁) and phenylenediamine (D₂) in a polar solvent, applying the resulting solution of polyamic acid in the polar solvent to a metallic foil, and then drying the solvent off, followed by heating to a polyimidization reaction temperature.